

FIG 1A

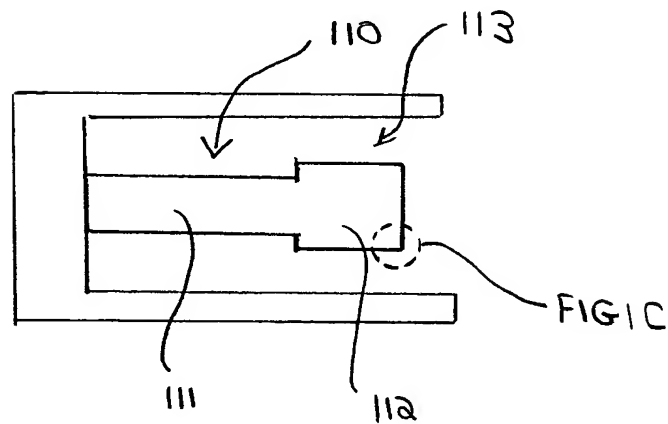
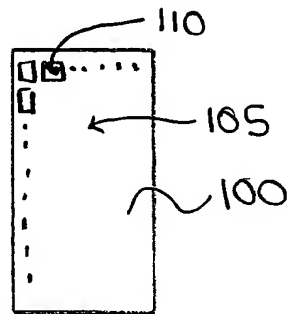


FIG 1B

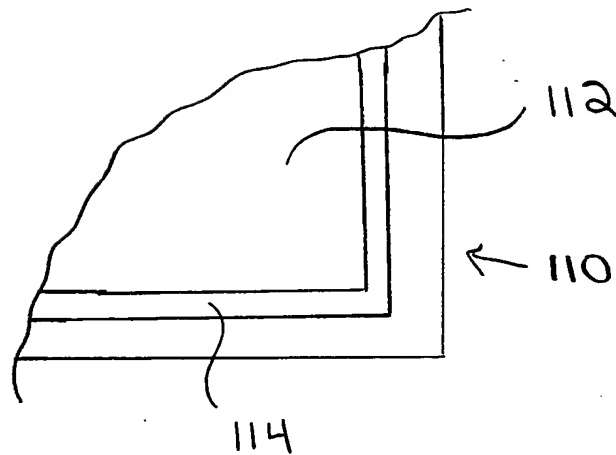
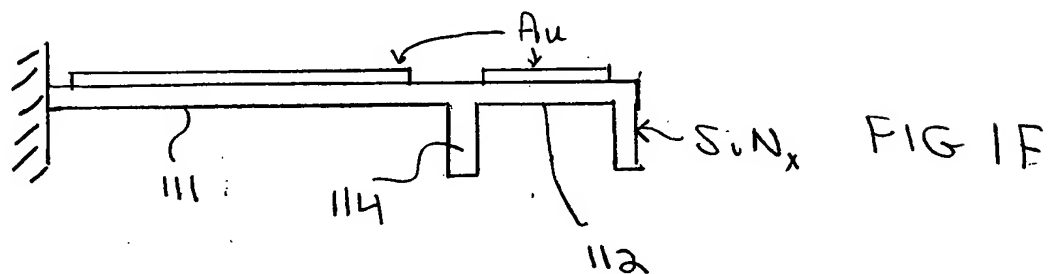
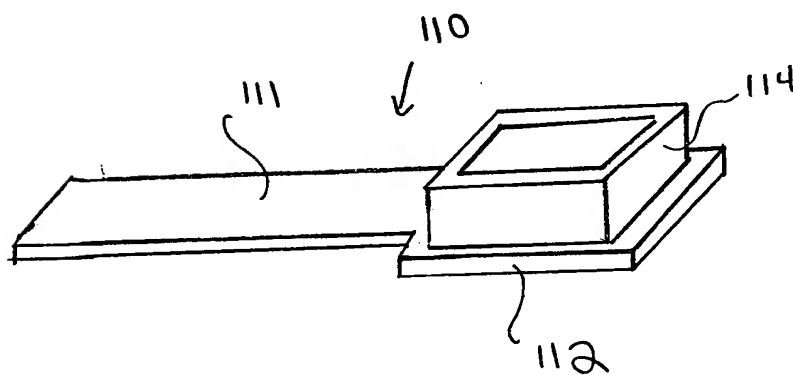
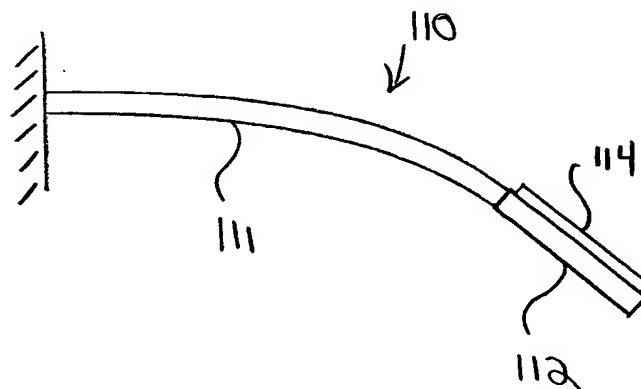


FIG 1C



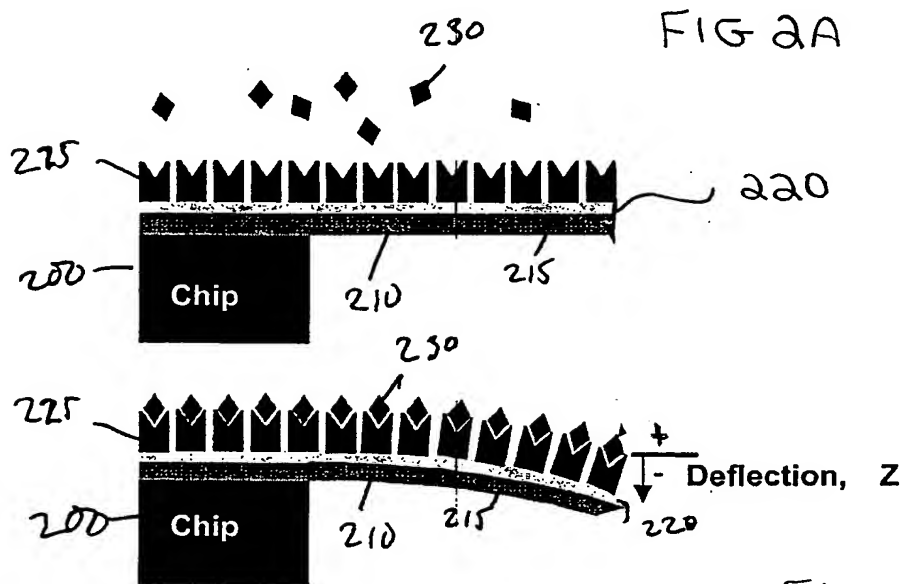
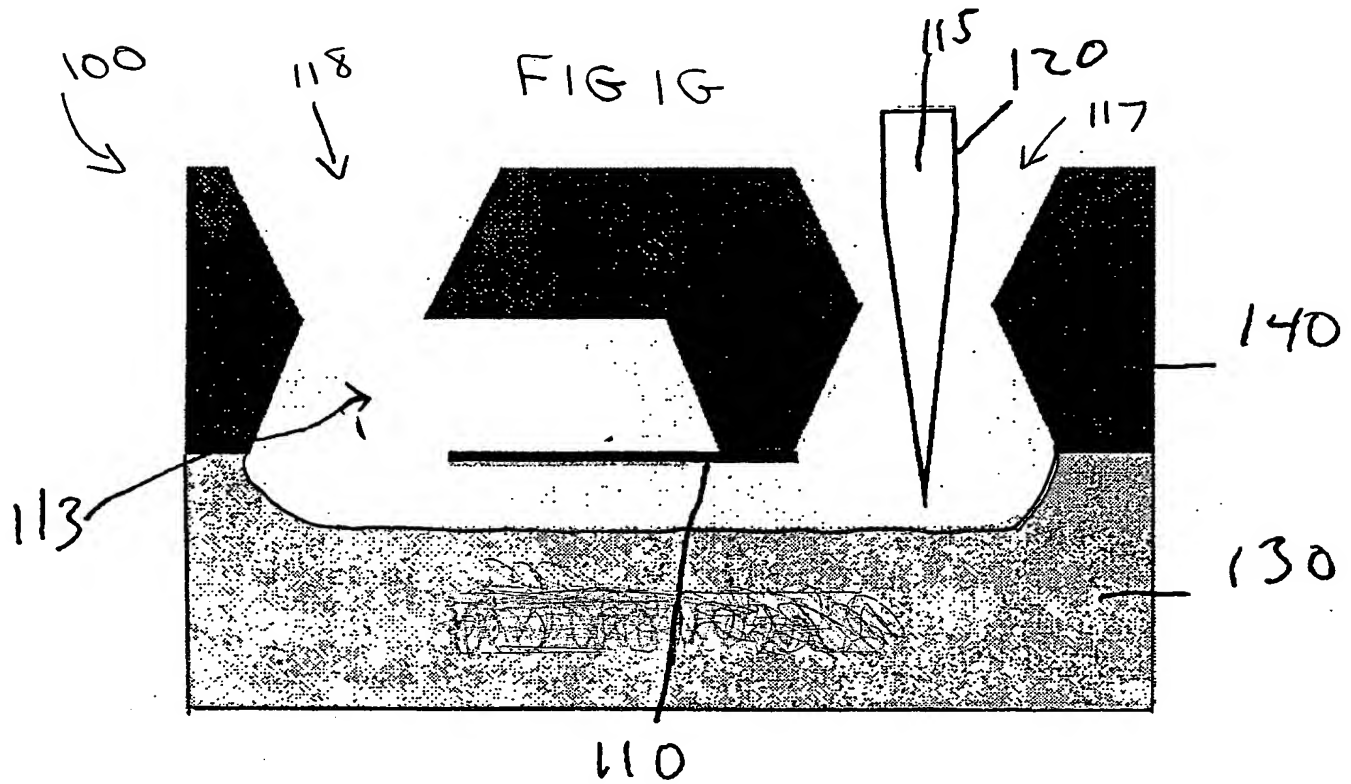


FIG 2B

FIG 3A

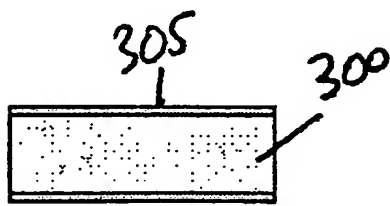


FIG 3B

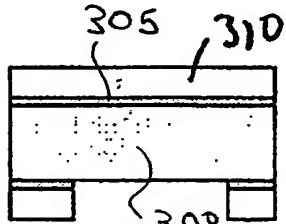


FIG 3C

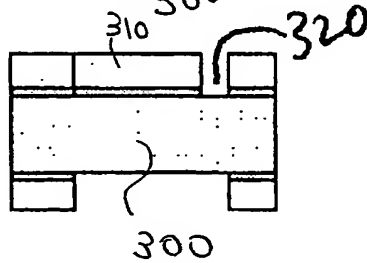


FIG 3D

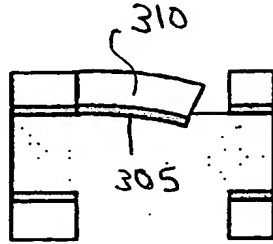


FIG 3E

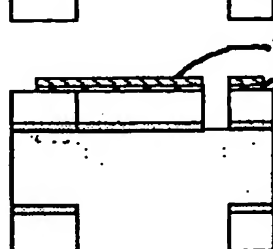


FIG 3F

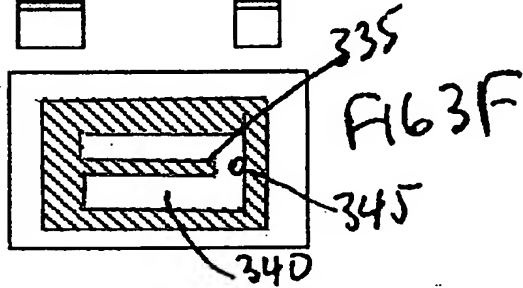
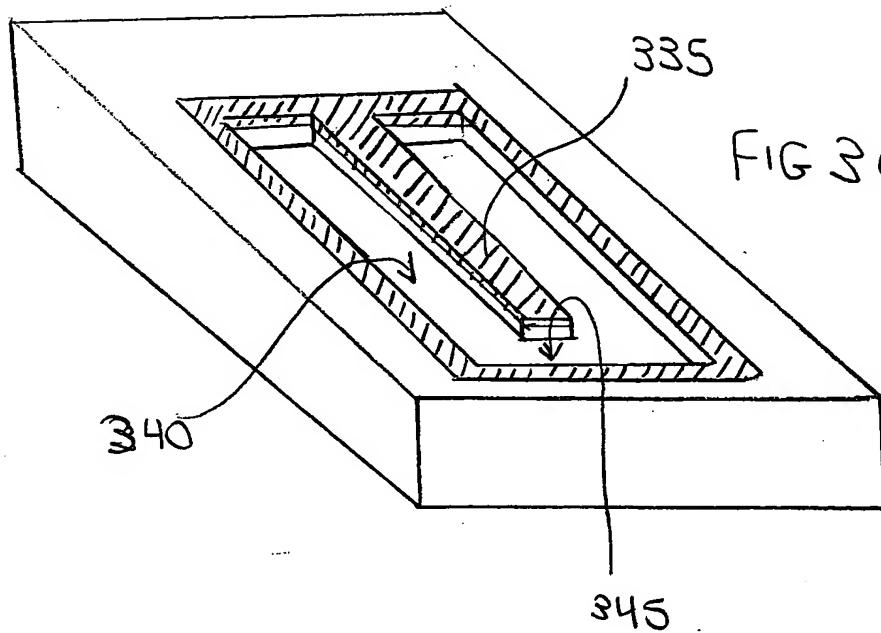


FIG 3G



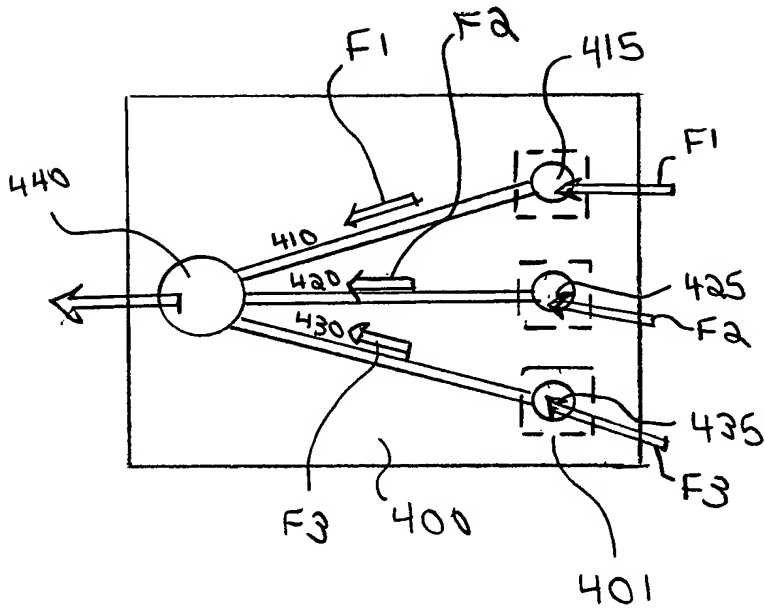


FIG 4A

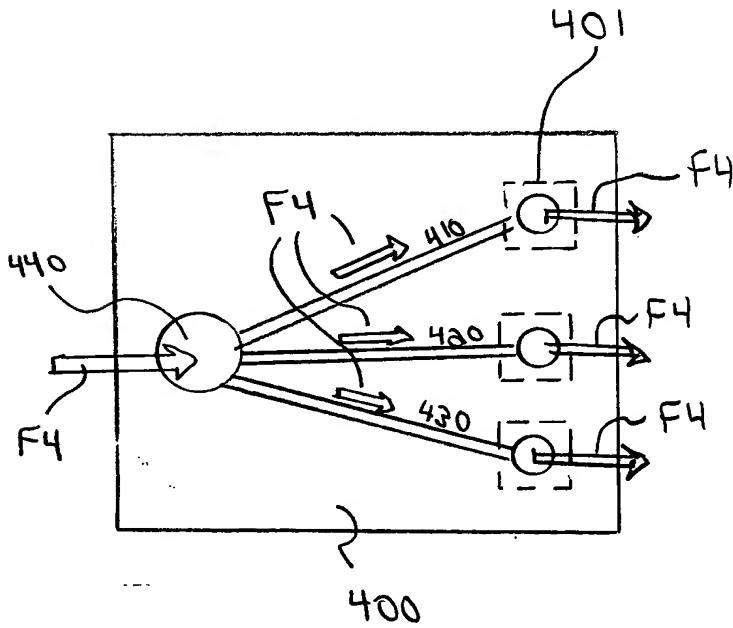
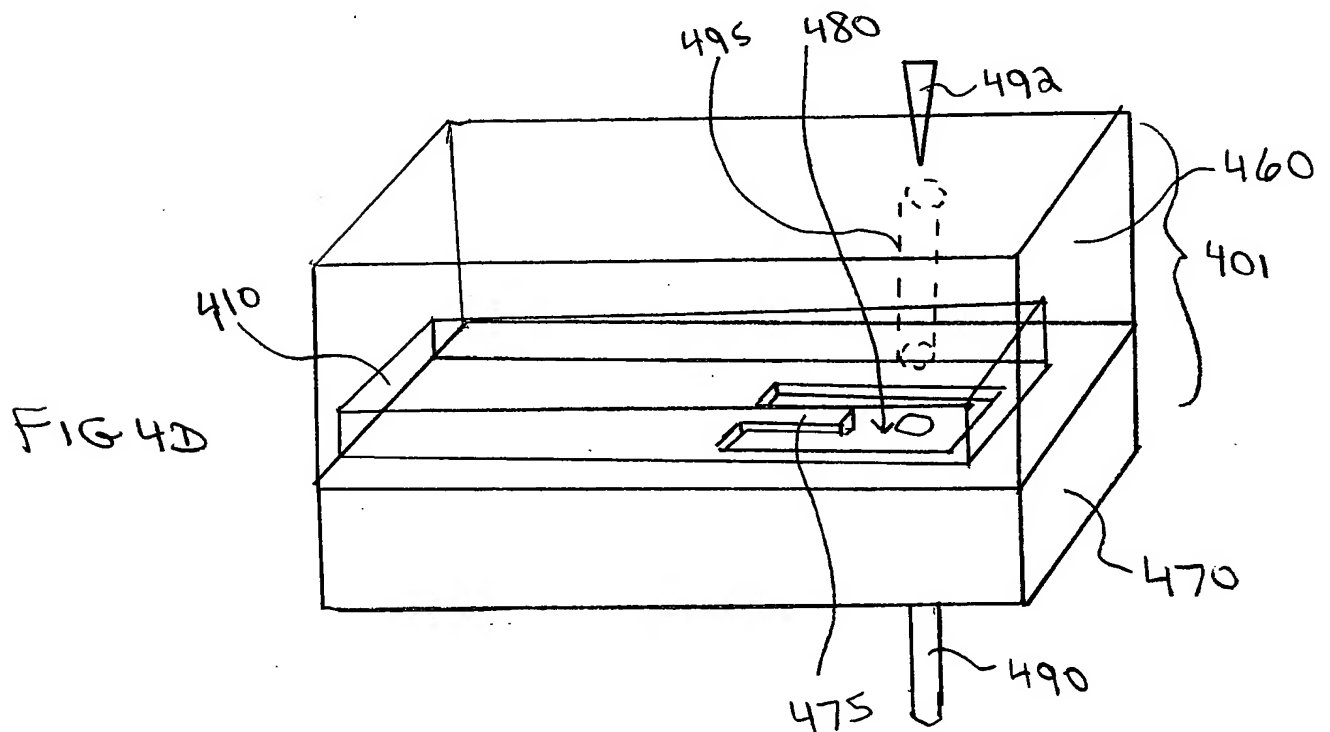
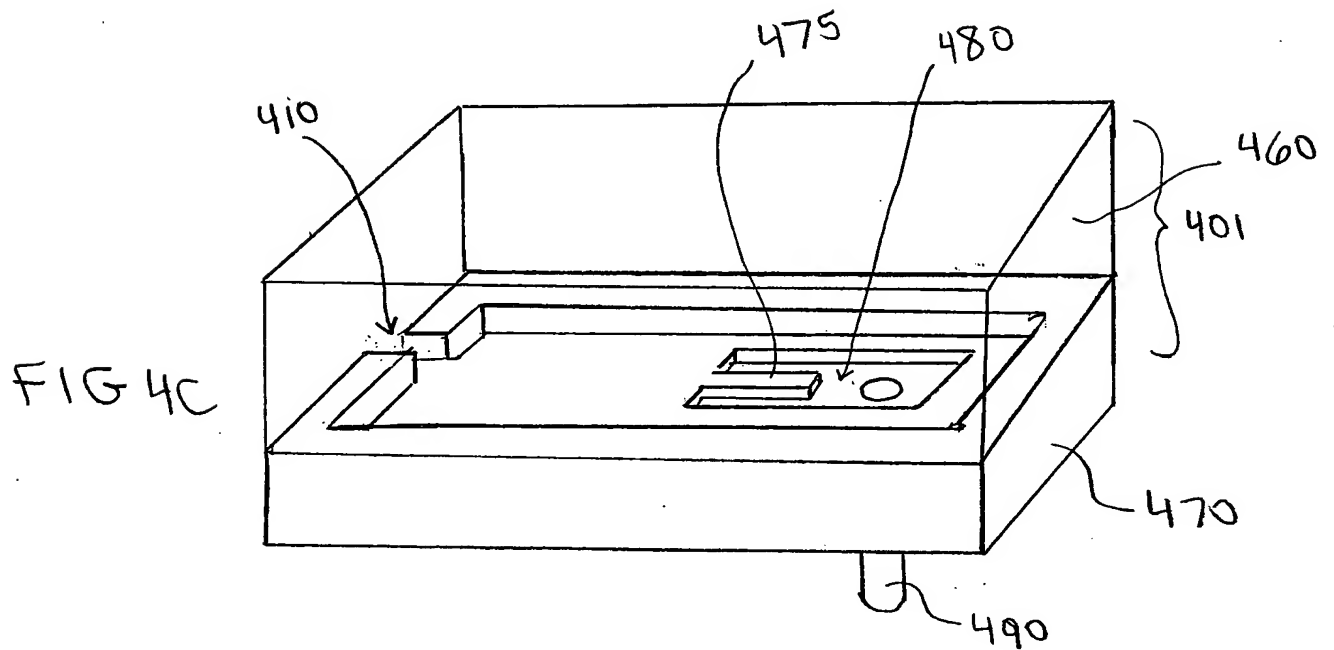
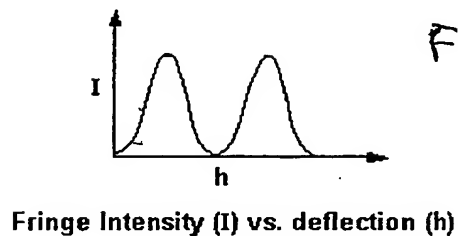
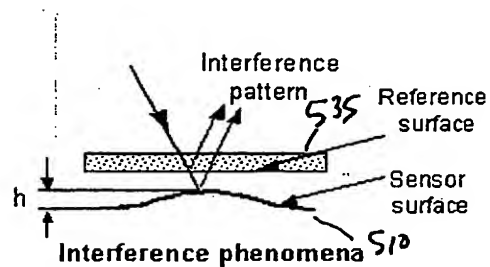
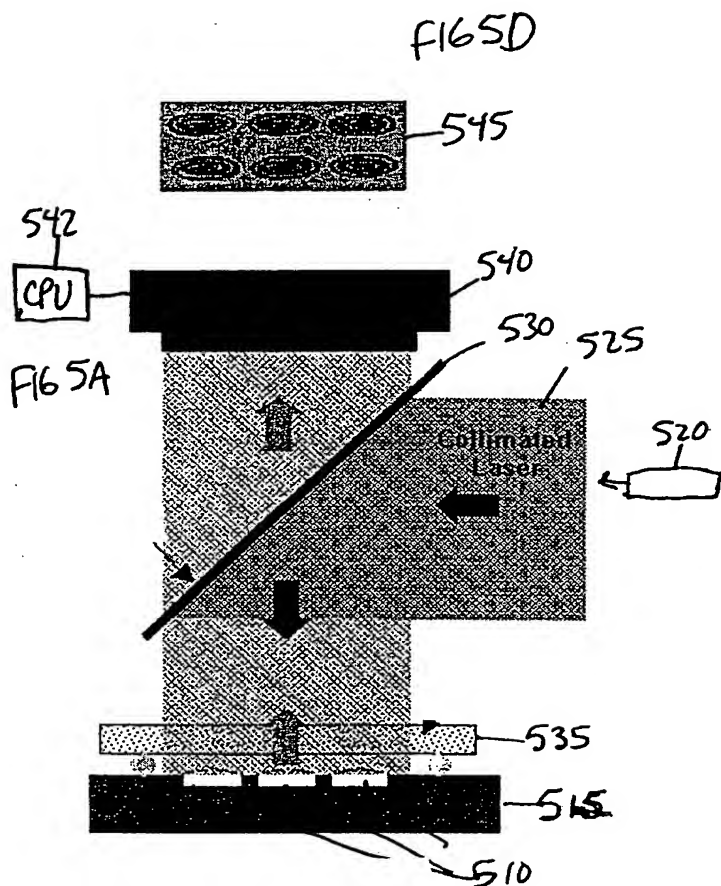
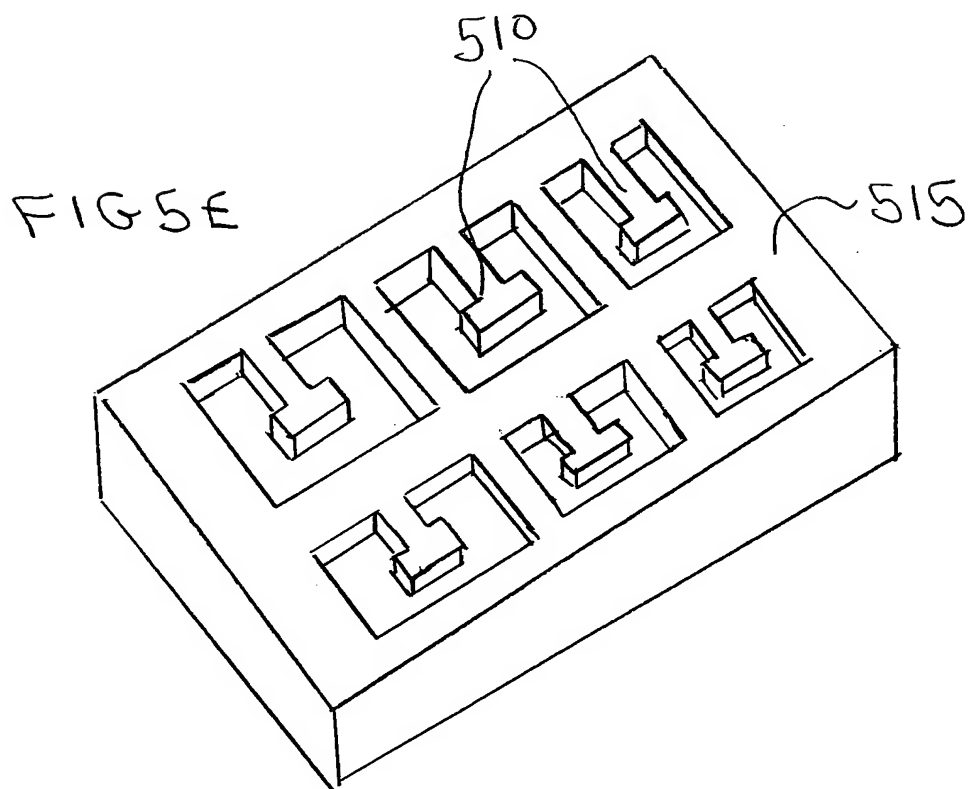


FIG 4B









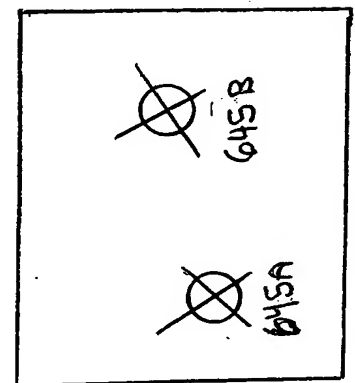
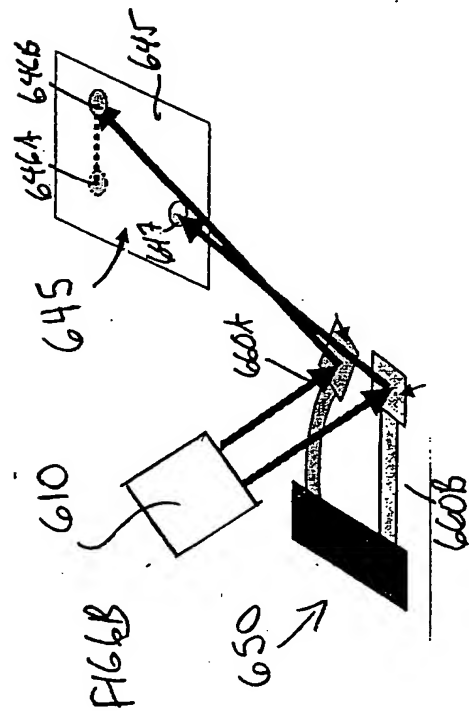
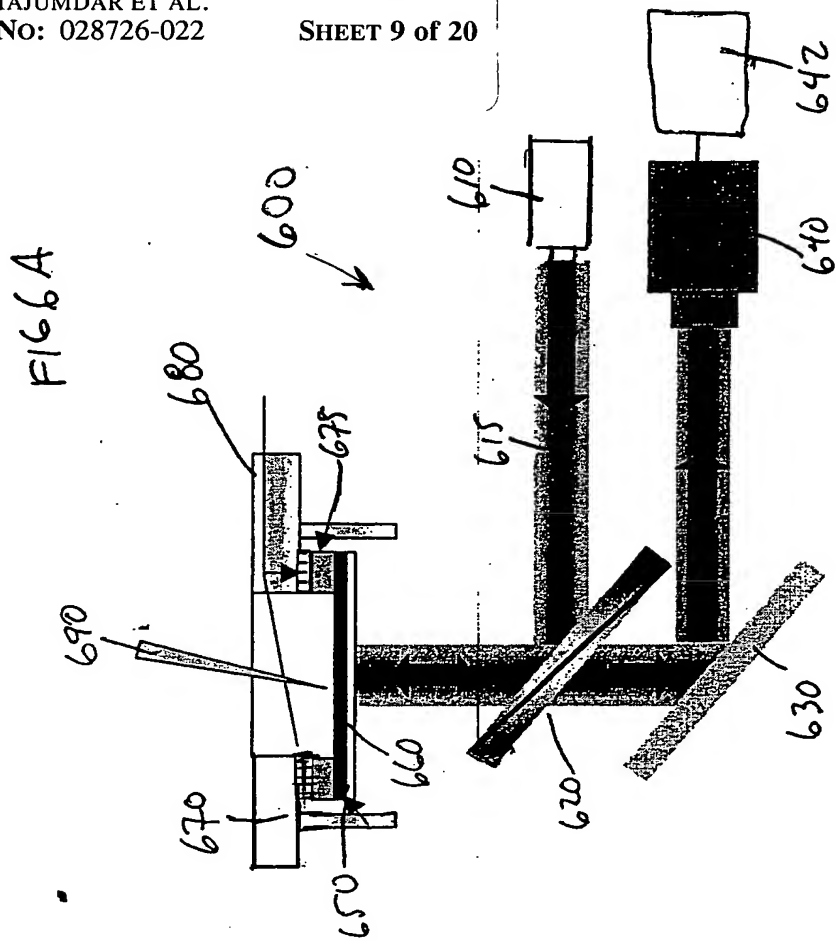


FIG 6C

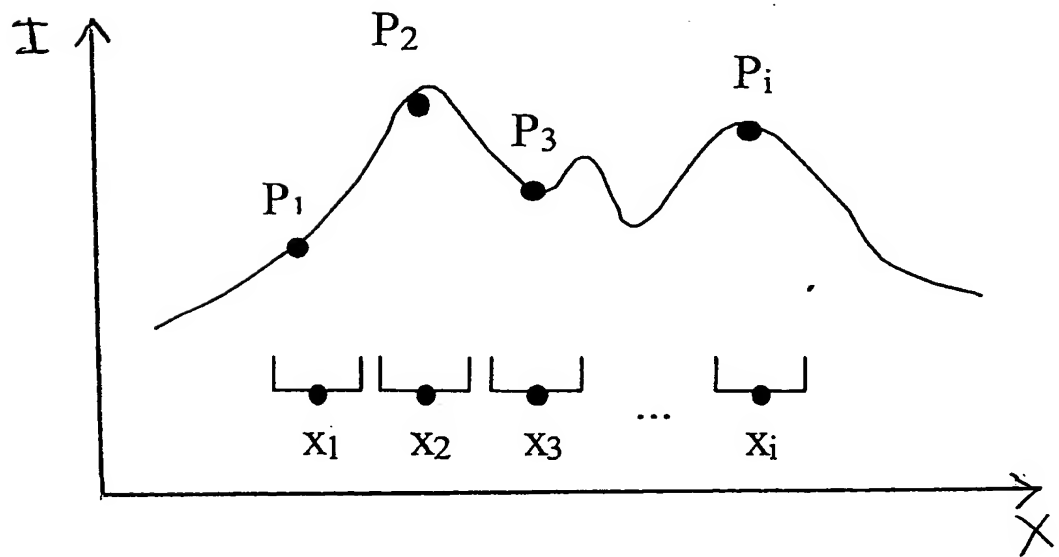
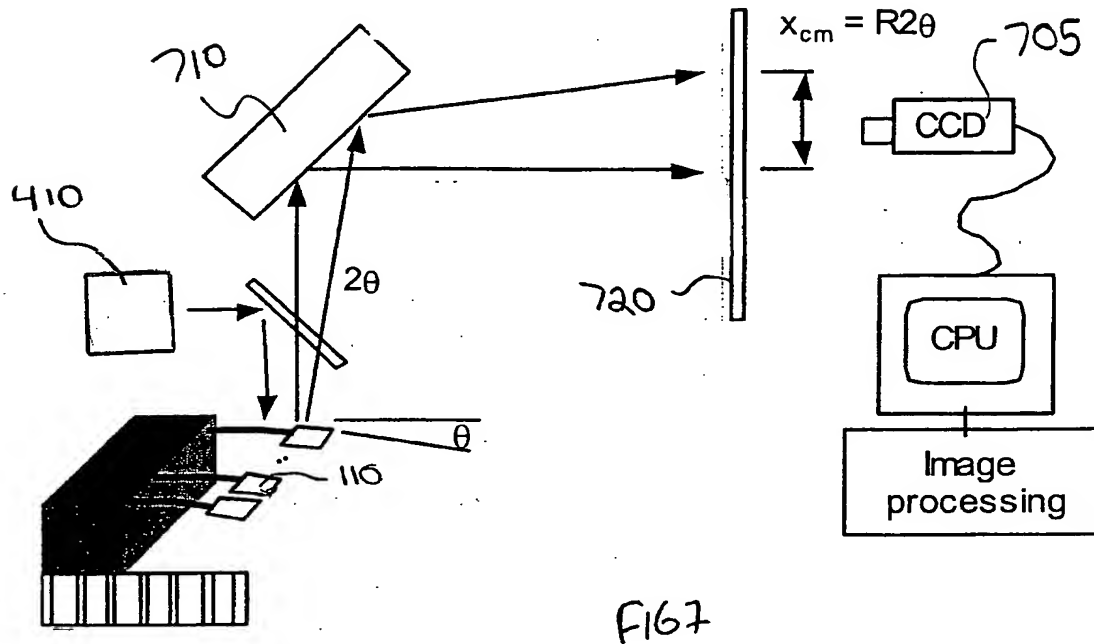


FIG-8

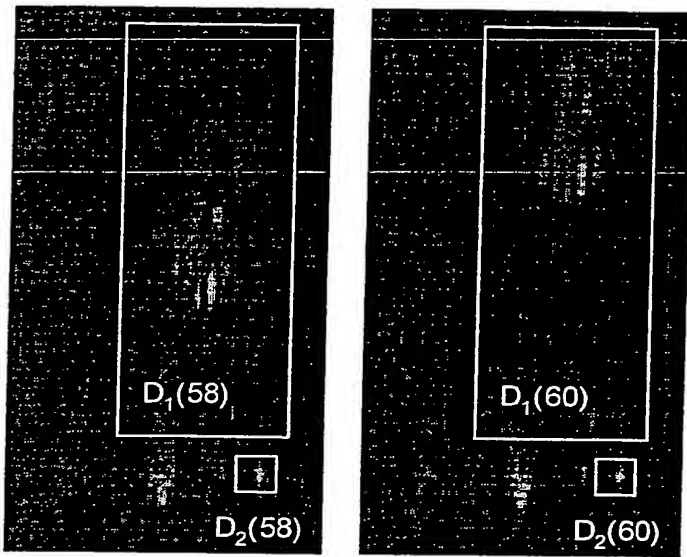


FIG 9

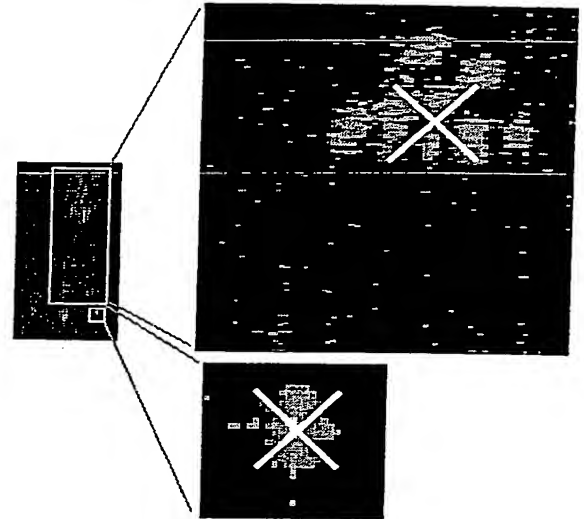


FIG 10

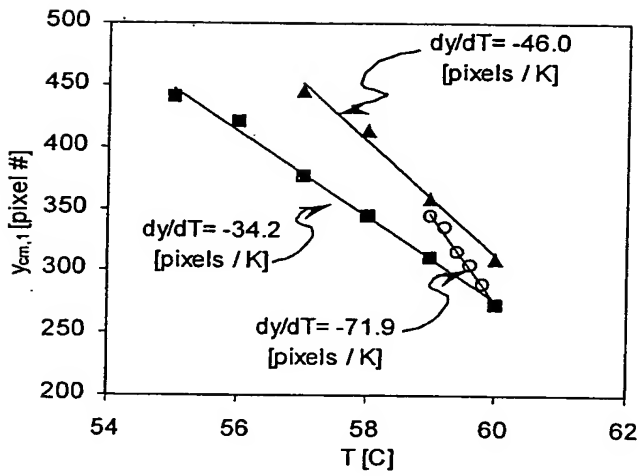


FIG 11A

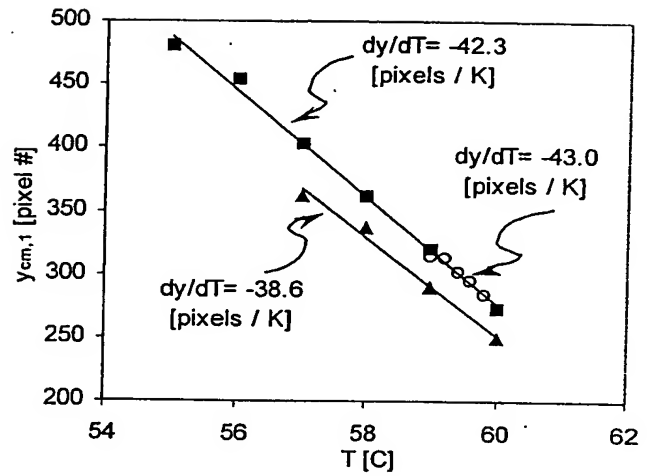


FIG 11B

FIG 13

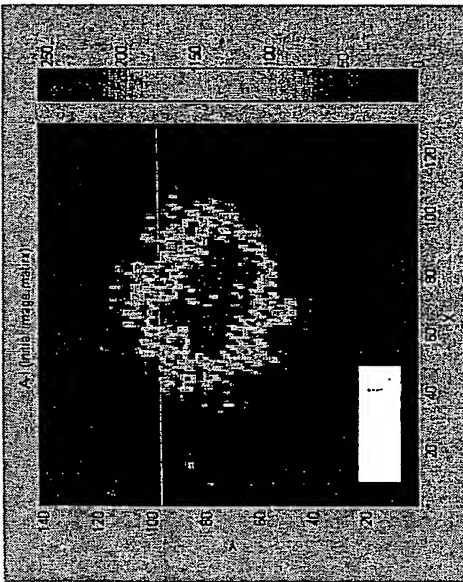
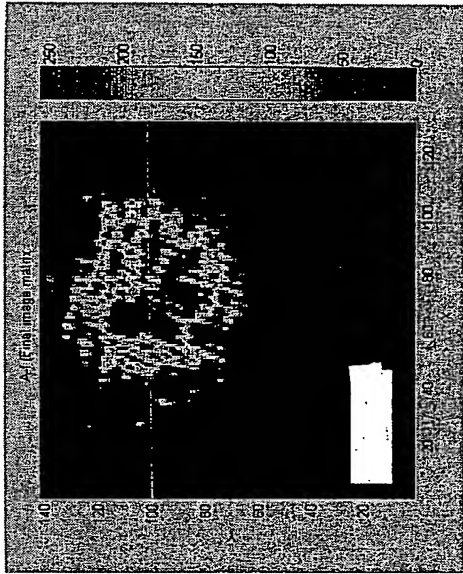


FIG 12

FIG 15

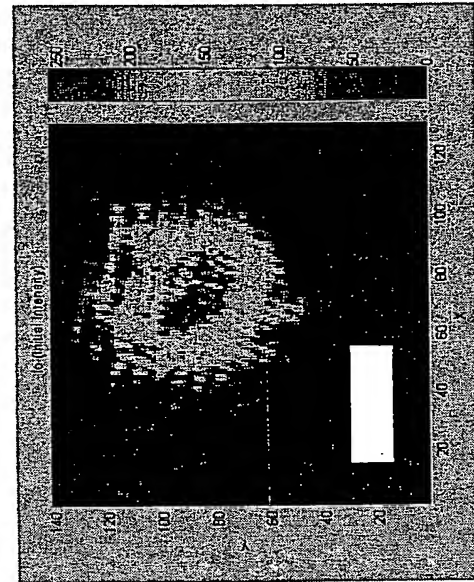
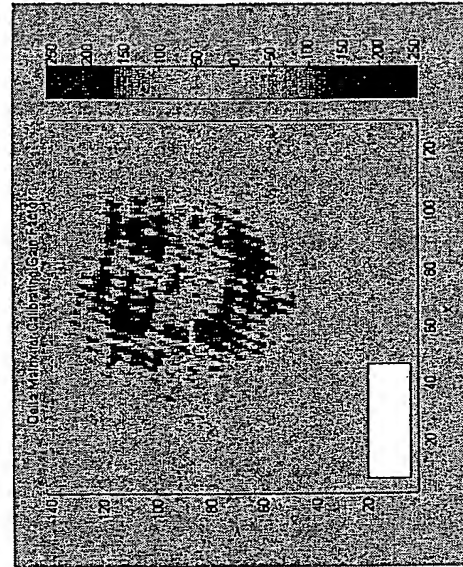


FIG 14

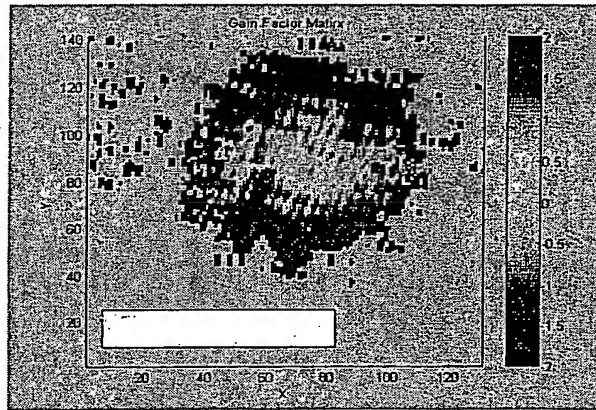


FIG 16

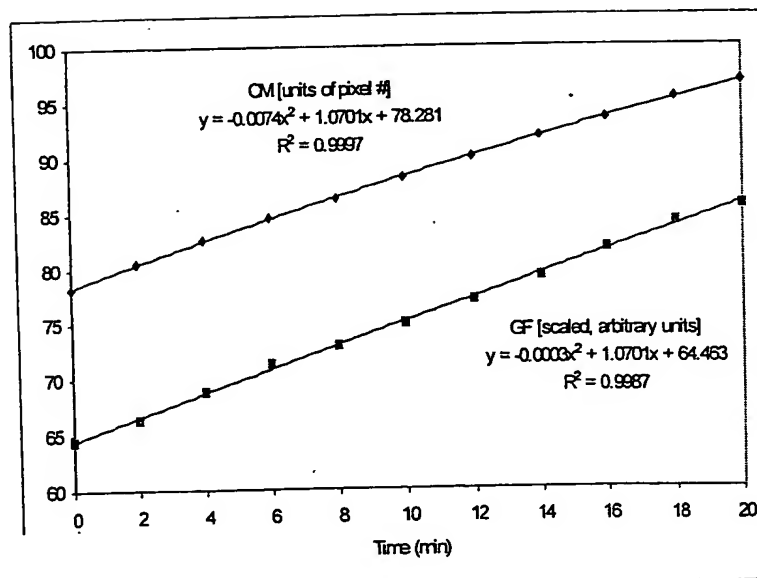


FIG 17

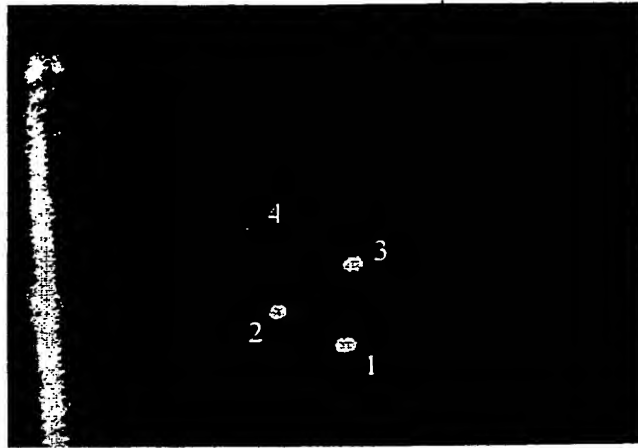


FIG 18

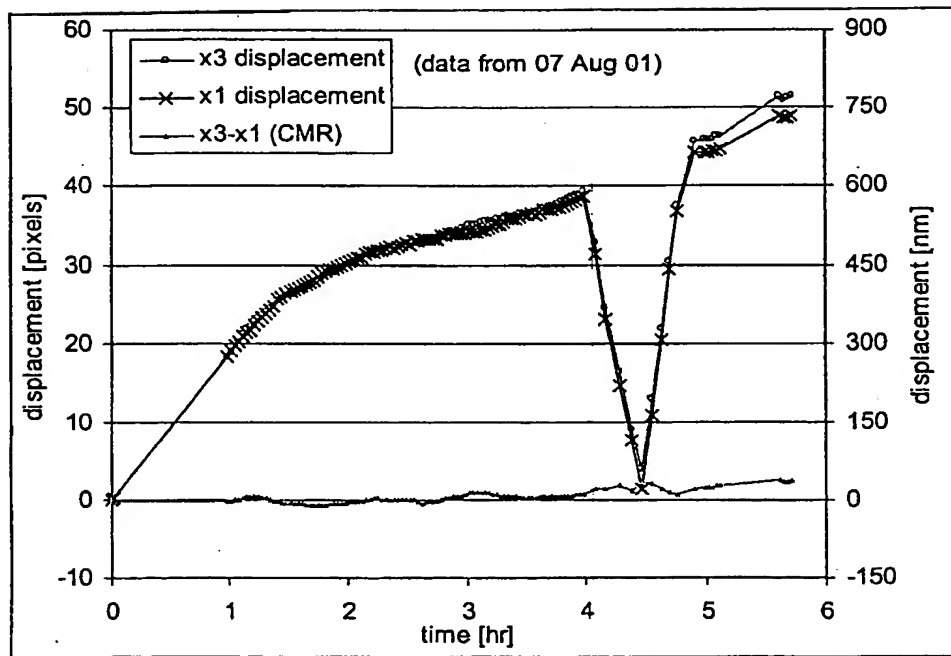


FIG 19

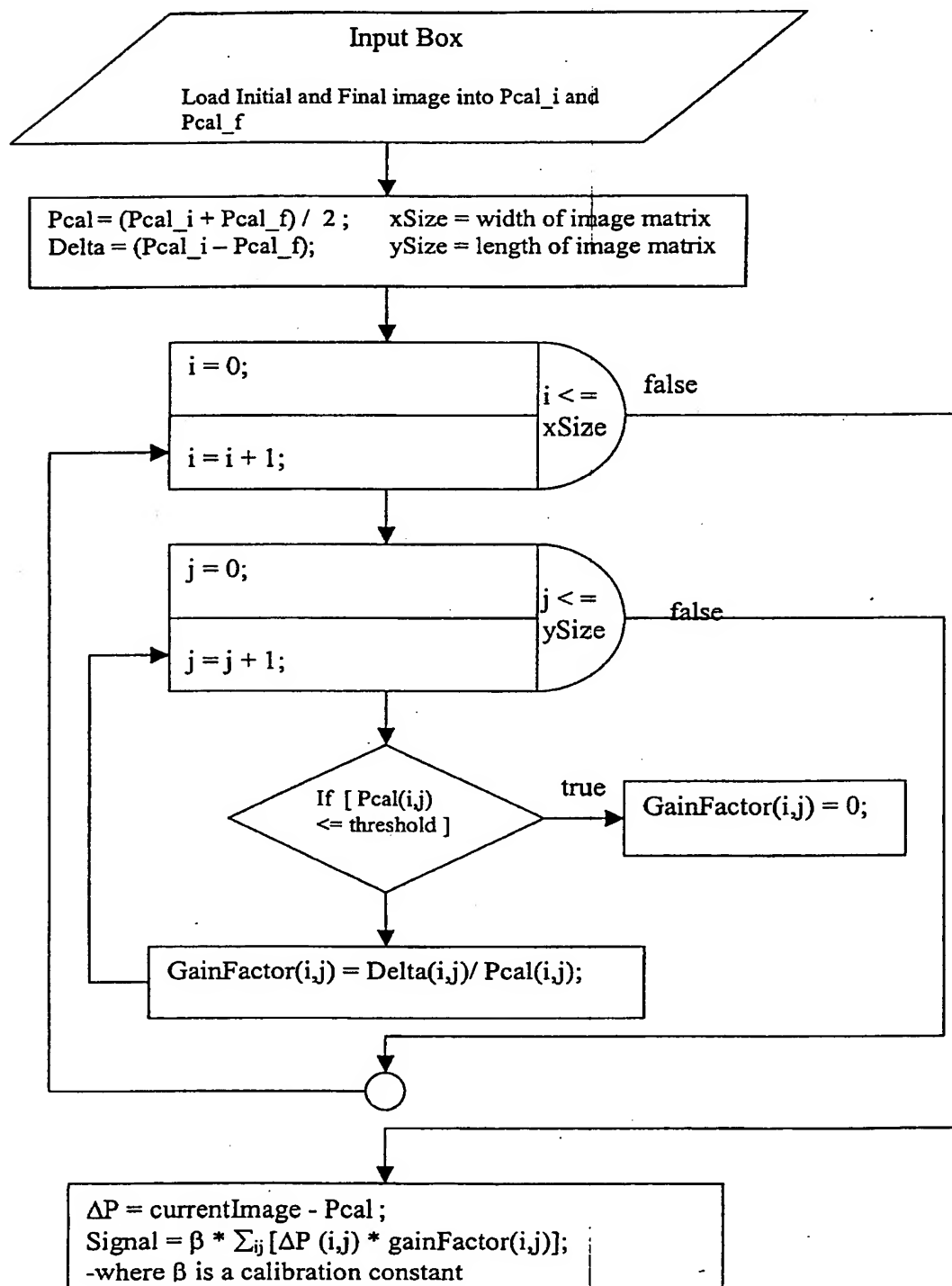


FIG 20

## PSEUDOCODE

```
% ----- Load in image -----  
Pcal_i = load in initial TIF image ;  
Pcal_f = load in final TIF image ;  
Pcal = (Pcal_i + Pcal_f) / 2;  
Delta = Pcal_i - Pcal_f;  
  
%----- Calibrating the Gain Factor Matrix -----  
for i = 1 to width of image Matrix  
    for j = 1 to length of image Matrix  
        if (Pcal(i,j) <= threshold )  
            gainFactor(i,j) = 0;  
        else  
            gainFactor(i,j) = delta(i,j) / Pcal(i,j);  
        end  
    end  
end  
  
%----- Calculating the signal -----  
  
 $\Delta P = \text{currentImage} - \text{Pcal};$   
 $\text{Signal} = \beta * \sum_{ij} [\Delta P(i,j) * \text{gainFactor}(i,j)];$ 
```

FIG. 21



FIG 22

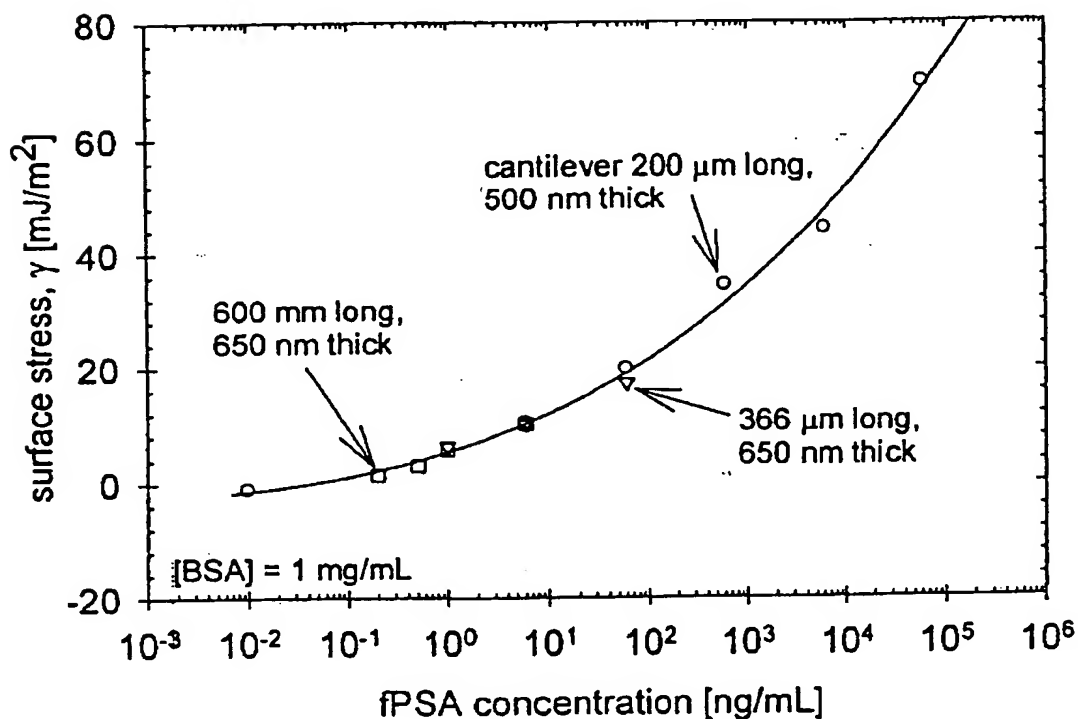
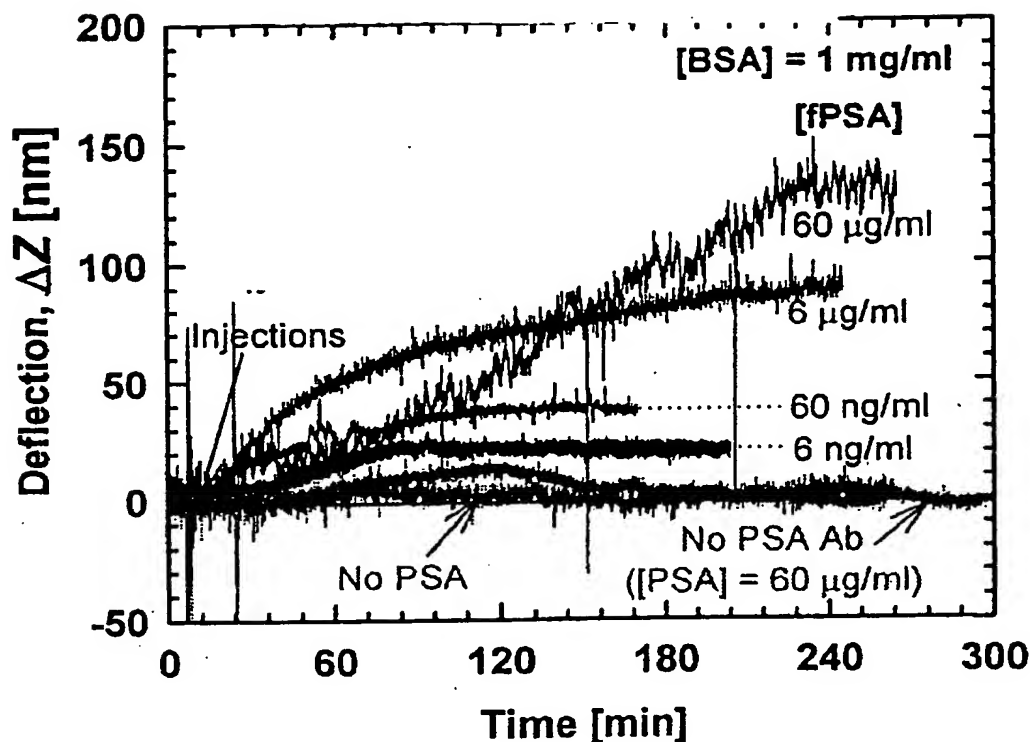
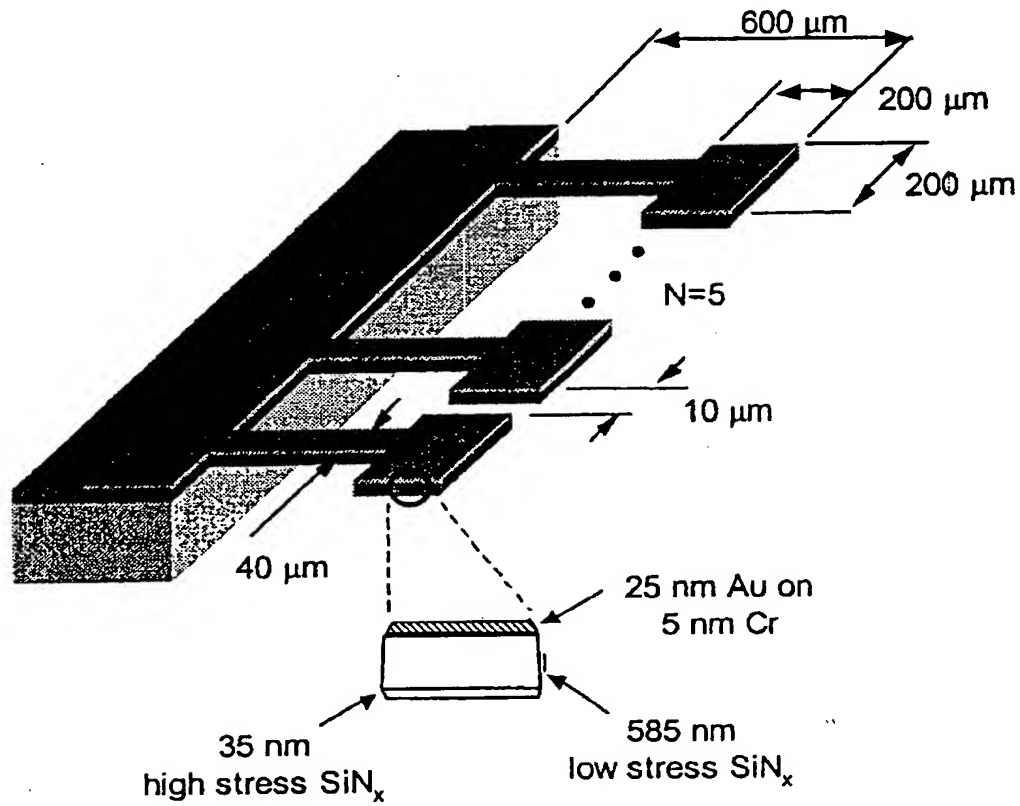


FIG 23

FIG 24



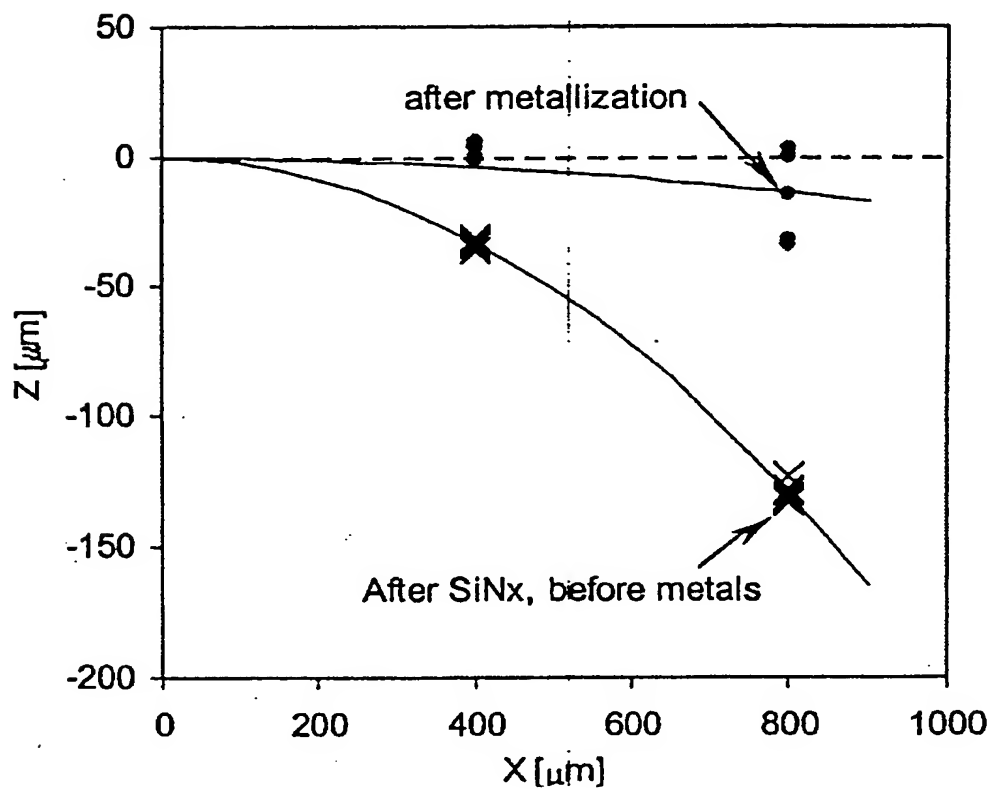


FIG 25

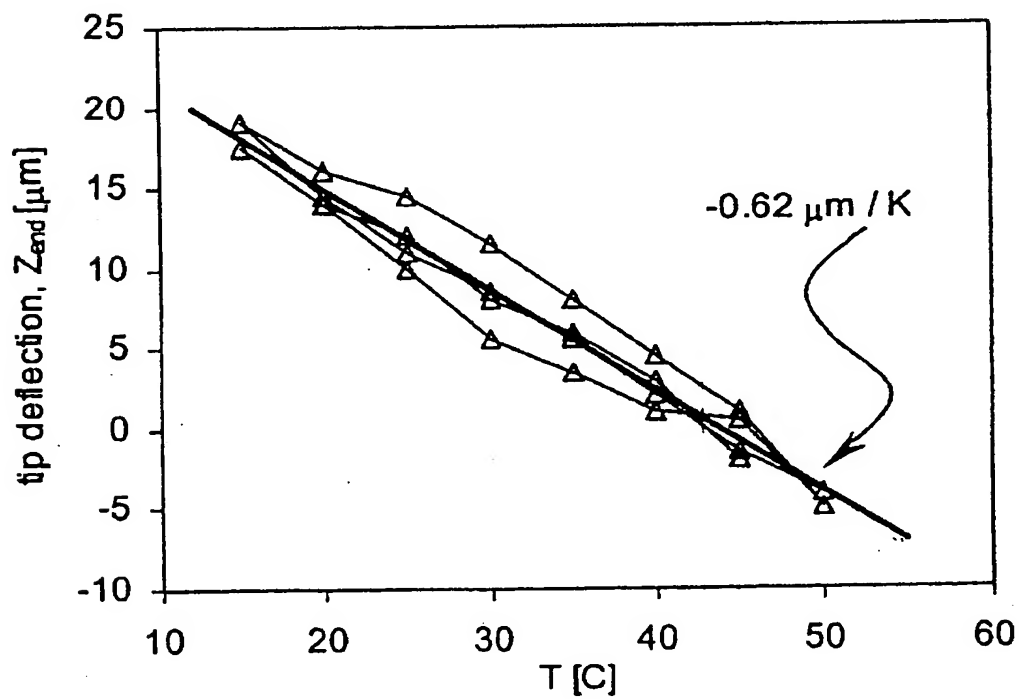


FIG 26

FIG 27

